Claims

1. A method of requesting access to a node (BS) of a wireless communications network (10), the method comprising the steps of:
    a) determining information about a transmission path (12) within the network (10);
    b) determining an identification code to differentially identify the requesting network component (UE) from other network components (UE) based on the determined transmission path information, wherein previously an association between identification codes and transmission path information has been established; and
    c) modulating the determined identification code onto a signal to generate an access request signal from which transmission path information may be derived.

2. The method of claim 1, further comprising:
    d) analyzing an access control signal that is received in response to the access request signal and that includes access control information (AI).

3. The method of claim 2, wherein the access control signal simultaneously includes access control information (AI) for a plurality of network components (UE) and wherein the access control information (AI) for each network component (UE) is associated in the access control signal with an individual identification code.

4. The method of claim 3, wherein the access control signal is subjected to an interference canceling step which includes subtracting from the access control signal a compensation signal relating to access control information (AI) that is not associated with the identification code determined in step b).

5. The method of one of claims 1 to 4, wherein the access request signal including the identification code determined in step b) is transmitted repeatedly using transmit power ramping.

6. A method of controlling access to a node (BS) of a wireless communications network (10), the method comprising the steps of:

a) receiving an access request signal onto which an identification code has been modulated, the identification codes differentially identifying the requesting network component (UE) from other network components (UE);

b) analyzing the identification code to derive a transmit power level therefrom, wherein previously an association between identification codes and transmit power levels has been established;

c) transmitting an access control signal including access control information (AI) at the transmit power level derived in step b).

7. The method of claim 6, wherein step b) comprises analyzing the identification code with respect to transmission path information associated therewith, wherein the identification codes are associated via transmission path information with transmit power levels and wherein the transmit power level corresponding to a specific identification code is derived from the transmission path information corresponding to the specific identification code.

8. The method of claim 6 or 7, wherein the access control signal includes the identification code analyzed in step b).

9. The method of one of claims 6 to 8, wherein the access control signal simultaneously includes access control information (AI) for a plurality of network components (UE) which are requesting access to the node (BS) and wherein the transmit power level for the access control signal is derived and adjusted individually for each network component (UE) which requests access.

10. The method of one of claims 1 to 9, wherein the identification code is selected out of a predefined set or range of identification codes.

11. A computer program product comprising program code portions for performing the steps of one of claims 1 to 10 when the computer program product is run on a network component (UE, BS).

12. The computer program product of claim 11, stored on a computer-readable recording medium.

13.   A network component (UE) configured to request access to a node (BS) of a wireless communications network (10), the network component (UE) comprising:

   a)   a first determination unit for (20) determining information about a transmission path (12) within the network (10);

   b)   a database (22) including data associating identification codes and transmission path information the identification codes differentially identifying the requesting network component (UE) from other network components (UE); and

   c)   a second determination unit (24) for determining in dependence on the determined transmission path information an identification code to be included in an access request signal from which transmission path information may be derived.

14.   The network component of claim 13, further comprising:

   d)   a modulator (26) for modulating the selected identification code onto a signal to generate the access request signal; and

   e)   a transmitter (28) for transmitting the access request signal.

15.   A network component (BS) configured to control access to a node (BS) of a wireless communications system (10), the network component (BS) comprising:

   a)   a database (46) including data associating identification codes from which transmit power information may be derived, the identification codes differentially identifying the requesting network component (UE) from other network components (UE);

   b)   an analyzer (44) for analyzing the identification code included within a received access request signal with respect to the transmit power information associated with the identification code; and

   c)   a derivation unit (48) for deriving from the transmit power information obtained by the analyzer a transmit power level for an access control signal.

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16. The network component of claim 15, further comprising:

    d)   a receiver (42) for receiving the access request signal onto which the identification code has been modulated; and

    e)   a transmitter (50) for transmitting the access control signal at the transmit power level derived by the derivation unit (48), wherein the access control signal includes access control information (AI) and, preferably, the identification code which has been modulated onto the received access request signal.